

CLAIMS

What is claimed is:

- 1 1. A signal router, comprising:
2 a signal transducer configured to write J
3 identical images of a first set of data from N inputs to J
4 random access memories during a first time interval;
5 M respective bit selectors each configured to
6 read respective portions of a respective one of said J
7 identical images;
8 each of said K respective bit selectors being
9 further configured to construct a respective one of K
10 output data streams during a second time interval.
- 1 2. A signal router as in claim 1, wherein said
2 signal transducer is further configured to write J
3 identical images of a second set of data from said N inputs
4 to said K random access memories during said second time
5 interval.
- 1 3. A signal router, as in claim 1, wherein said
2 signal transducer includes a buss to which said first set
3 of data is applied and addressing controllers configured to
4 write data from said buss to said random access memories,
5 whereby said J identical images are written.
- 1 4. A signal router, comprising:

2 a controller programmed to store identical images
3 of data from said N inputs in K memories;

4 said controller being further programmed to read
5 respective bits of said data from each said K memories to
6 produce K respective output data streams, whereby N inputs
7 are mapped to K outputs.

1 5. A router as in claim 4, further comprising a
2 data buss connected to receive said N inputs and distribute
3 them to said K memories.

1 6. A router as in claim 5, wherein a bit rate
2 of each of said K outputs is less than a bit rate of said
3 buss.

1 7. A method of routing data from N inputs to M
2 outputs, comprising the steps of:

3 applying data from said N inputs to a data buss
4 by means of at least one of time and space multiplexing;

5 imaging said data on M random access memories
6 from said buss;

7 reading respective sets of bits from said random
8 access memories to form respective ones of said signals
9 ultimately demultiplexed to form said M outputs.